FOODS AND DRUGS

LABORATORY

OF THE

DEPARTMENT OF TRADE AND COMMERCE

OTTAWA. CANADA.

BULLETIN No. 420

ICE CREAM.

54103

NOTES AND COMMENTS.

Under this heading, as occasion arises, the Bulletins issued by this Department will contain, as an appendix, such comment as may seem necessary or advisable upon matters relating to the work of the Department in connection with the administration of the Adulteration Act, the Fertilizers Act, the Feeding Stuffs Act or the Proprietary Medicines Act.

It frequently happens that correspondents ask information regarding the above Acts, of such a nature that the matter in question possesses general interest, and comment upon it would prove acceptable and useful to others than the immediate questioner. In such cases the reply may find a place in these columns. For convenience of reference these notes will be numbered in series.

A. McGILL,

Chief Analyst.

FOODS AND DRUGS

LABORATORY

OF THE

DEPARTMENT OF TRADE AND COMMERCE

OTTAWA, CANADA

BULLETIN No. 420

ICE CREAM.

OTTAWA, January 9, 1919.

F. C. T. O'HARA, Esq.,
Deputy Minister of Trade and Commerce.

SIR,—I beg to hand you herewith a report upon sixty-four samples of Ice Cream, purchased by our inspectors in September, October and November of last year.

Ice Cream, formerly looked upon as a luxury, has now come to be regarded as a very desirable food, and is largely prescribed by physicians in cases of convalescence, as well as in certain diseased conditions. Our original standards for the article, as published in G. 934 (Nov. 14, 1910) considered Ice Cream to be essentially a frozen cream, and demanded that it should contain not less than 14 per cent. of milk fat. Later investigation, and especially the opinions of the Medical Advisers of the Department, found that a more desirable article would contain less than 14 per cent. of fat; and G. 1178 (8 April, 1915) was issued announcing that no action would be taken to interfere with the manufacture of Ice Cream containing not less than 7 per cent. of fat. Subsequent developments, consequent upon the scarcity of fats, owing to war conditions, led to restrictions placed upon the use of fats by the Food Board, and we considered it inadvisable to press strict standardization until the close of the war should restore normal food conditions. It is satisfactory to find that most of the samples herein reported are fully up to a 7 per cent. standard; and in the cases (13 in number) where slightly less than this amount is present, I would respectfully recommend that no penalty be imposed, the conditions obtaining during the period covered having been quite exceptional.

In addition to determination of the fat content of these samples attention has been given to the nature of the thickener employed to give desirable consistency. Gelatin is more largely used for this purpose than any other material, being found alone, or along with small amounts of gums, in 36 samples. Our standards permit of the addition of not more than 2 per cent; and this limit is only exceeded in two samples. Other thickeners found are starch (in 11 samples) and gums, with or without starch or gelatin, in 10 samples. None of these articles are in any way objectionable as food products.

Samples containing no thickener	17
" " starch only	7
" " gelatin only	28
" " gums only	2
" " gums and starch	2
" " gums and gelatin	5
" " starch and gelatin	2
" " starch, gelatin and gum	1
Total	64

No. of Sample.	Results of Analysis.			No. of Sample.	Results of Analysis.		
	Fat.	Cane Sugar.	Name of Thickener.		Fat.	Cane Sugar.	Name of Thickener.
	p. c.	p. c.			p. c.	p. c.	
80261	11·51	.....	None.	86900	6·7	9·1	Gelatin.
80264	7·71	.....	"	86901	6·2	6·5	"
80268	11·85	.....	"	86902	6·8	6·6	"
84626	9·0	8.5	"	86301	9·6	10·2	"
80797	7·6	9·9	"	88133	4·4	12·6	"
86444	10·65	8·1	"	88134	8·6	10·2	"
86445	10·60	9·6	"	88136	9·4	11·0	"
86446	9·35	10·0	"	88138	9·6	7·1	"
86447	10·00	9·7	"	88141	10·0	10·7	"
86448	13·20	10·8	"	81367	6·3	7·0	"
68726	6·40	7·04	"	81368	5·7	6·2	"
68731	6·70	8·49	"	81369	9·9	6·6	"
68732	7·70	8·82	"	81370	9·6	10·4	"
86166	9·6	8·8	"	68697	8·5	10·94	"
86167	18·3	14·1	"	68698	8·4	9·20	"
86168	8·7	10·1	"	68729	8·6	6·94	"
86169	11·8	10·4	"	80269	14·14	.....	Gum.
83948	6·69	.....	Starch.	88140	8·6	8·4	"
80266	9·07	.....	"	84628	8·7	14·2	Starch and gum.
80267	11·05	.....	"	88142	10·6	10·4	"
81366	6·20	11·3	"	84629	6·7	6·0	Gelatin and gum.
68695	7·60	1·21	"				
68696	5·80	2·63	"	86302	6·8	13·4	"
68730	11·50	7·88	"	86303	13·1	12·3	"
83946	8·24	.....	Gelatin.	86304	11·5	9·6	"
83947	7·66	.....	"	86305	8·8	11·1	"
83949	11·03	.....	"	88135	11·4	10·9	Starch and gelatin.
83950	8·05	.....	"	88137	13·4	11·2	Starch and gelatin with Peach Fruit.
80262	10·89	.....	"				
80263	13·36	.....	"				
80265	9·40	.....	"				
80270	7·29	.....	"				
84625	9·3	10·6	"	88139	8·9	9·8	Starch, gelatin and gum.
84627	9·0	12·3	"				
80798	5·8	9·5	"				
80799	5·4	13·7	"				

For the most part the thickener is present to about one half of one per cent; but in two cases, where starch was used, the amounts found were No. 68695, 2·66 p.c.; No. 68696, 2·01 p.c.

The sugar content has been determined in most of these samples, and varies from about 7 per cent to about 12 per cent. in most of them. Two samples contain less than 3 per cent; and six more than 12 per cent sugar; but these are exceptional.

I would respectfully recommend publication of this report as Bulletin No. 420.

I have the honour to be, Sir,

Your obedient servant,

A. McGILL,
Chief Analyst.